

## ABSTRACT

A buttress for use with circular surgical staplers that does not require adhesive to securely fasten the buttress to the stapler and that self-aligns onto the stapler. Following 5 cutting and stapling by the circular stapler, the buttress has an adaptive opening through its central region with a diameter smaller than the outer diameter of the stapler anvil. Because of relief features built into the buttress, the stapler anvil may be pulled through the buttress material without causing permanent alteration to the buttress. These relief features may be provided regardless of whether the buttress is made of inelastic or elastic materials. The 10 buttress is generally circular in shape with an outer diameter sized to coincide with the outer diameter of the stapler body staple compression surface and the outer diameter of the anvil compression surface of a circular stapler with which it is used. Prior to surgical use, the buttress is provided with a generally circular hole in the central region that is sized to closely fit the central shaft of a circular stapler with which it is used.